# Cognitive Assessment





### Cardiovascular

- 1. An airman presents to the First Aid station with a stab wound to the left arm, midway between the wrist and the elbow. The site is bleeding profusely. No broken bones are evident. What is the first intervention to control the bleeding?
  - A. Apply pressure to the wound and elevate above heart level
  - B. Elevate wound above heart level and monitor for bleeding
  - C. Apply pressure to wound and to proximal pressure point
  - D. Apply a tourniquet 2 inches proximal to the stab wound
- 2. The method of "last resort" for controlling bleeding is
  - A. Direct pressure at wound
  - B. Use of pressure points
  - C. Elevation of extremity
  - D. Use of a tourniquet
- 3. A wounded soldier presents with uncontrolled internal hemorrhage due to a land mine injury. The OR is backed up and the surgeon will not be available for 10 minutes. Fluid resuscitation is initiated. What is the target for the initial resuscitation?
  - A. Increase fluid to achieve a urine output > 30 ml/hr
  - B. Mean arterial pressure ~ 60 mm Hg
  - C. Mean arterial pressure ~ 80 mm Hg
  - D. Discontinue resuscitation the patient is expectant
- 4. In a patient with <u>acute blood loss</u>, which of the following would be the <u>initial</u> fluid replacement of choice?
  - A. Whole blood
  - B. D5W
  - C. ½ Normal saline (0.45%)
  - D. Lactated Ringers

5. A 22-year old patient is admitted following surgical repair of a gunshot wound to the small intestine. Vital signs are:

Heart rate: 152
Blood pressure: 80/40
Respiratory rate: 26
Temperature: 98F
Lung sounds: clear

These findings are indicative of the development of which type of shock?

- A. Cardiogenic
- B. Neurogenic
- C. Hypovolemic
- D. Anaphylactic
- 6. Capt Jones suffered a deep laceration of the left upper arm with spurting bright, red bleeding. According to his field triage tag, and the annotation on his forehead, a tourniquet was applied at 0950. It is now 1100 and he is being prepared for evacuation. What is the next plan of care?
  - A. Keep the extremity elevated and slightly release the amount of pressure exerted by the tourniquet so as to keep the arm viable; re-mark his forehead
  - B. Reinforce the pressure dressing already in place, release the tourniquet and proceed to evacuate him; re-mark his forehead
  - C. Re-assess ABCs, monitor VS, cover him but leave the extremity with the tourniquet exposed and proceed to evacuate him
  - D. Reinforce the pressure dressing already in place, re-assess level of consciousness, provide oral fluid replacement, evacuate to the MTF ASAP
- 7. Which of the following positions would be best in the setting of hypovolemic shock with hypotension?
  - A. Supine
  - B. Side-lying
  - C Trendelenburg at 30-degrees head down
  - D. Supine with the legs elevated 10-12 inches
- 8. A patient presents with dyspnea, hives, tachycardia and hypotension. Initial treatment after establishing an airway is:
  - A. Benadryl PO
  - B. Atarax IM
  - C. Epinephrine SQ
  - D. Two large bore IVs

- 9. What is the correct dose and strength of epinephrine in the initial treatment of anaphylactic shock?
  - A. 0.1 to 0.5 ml of a 1:1,000 solution
  - B. 0.6 to 1.0 ml of a 1:1,000 solution
  - C. 0.1 to 0.5 ml of a 1:10,000 solution
  - D. 0.6 to 1.0 ml of a 1:10,000 solution
- 10. A patient has an IV fluid infusion with tubing that has a drip factor of 15 drops per/ml. The provider has ordered 1000 cc's every 8 hours. What drip rate is required?
  - A. 32 drops/minute
  - B. 35 drops/minute
  - C. 50 drops/minute
  - D. 60 drops/minute
- 11. A 12-lead ECG can be performed using a 5-lead cardiac monitor.
  - A. True
  - B. False
- 12. Correct lead placement for the V1 precordial lead is
  - A. 4<sup>th</sup> intercostal space right sternal border
  - B. 4<sup>th</sup> intercostal space left sternal border
  - C. 5<sup>th</sup> intercostal space left midclavicular line
  - D. 5<sup>th</sup> intercostal space left anterior axillary line
- 13. You are deployed to Saudi Arabia. A flight line security guard collapsed. The patient is hot to touch with no sweat. His core temperature is 107°F. You are unable to auscultate a blood pressure. The immediate action is to:
  - A. Immerse the airman into an ice slurry to cool him down
  - B. Start CPR
  - C. Start an IV and begin aggressive volume resuscitation
  - D. Check his pulse

- 14. What is the maximum length of time a unit of PRBCs can hang once the bag leaves the blood bank?
  - A. Two hours
  - B. Three hours since the time the bag is punctured
  - C. Four hours
  - D. Four hours since the time the bag is punctured
- 15. You are assisting in triage. Signs of cardiac tamponade may include:
  - A. Distended neck veins, increased BP
  - B. Muffled heart sounds, increased BP
  - C. Decreased breath sounds, bradycardia
  - D. Pulsus paradoxus, muffled heart sounds
- 16. If a radial pulse is palpable, the systolic blood pressure is at least:
  - A. 60 mmHg
  - B. 80 mmHg
  - C. 100 mmHg
  - D. 120 mmHg
- 17. During a January deployment to Alaska, a patient is brought into a field detachment for evaluation. He states that after working outdoors for about two hours he began feeling lightheaded. His capillary refill time is 3.5 seconds. This capillary refill time would be considered:
  - A. Brisk, but within normal limits
  - B. Borderline, but within normal limits
  - C. Prolonged, but inconclusive
  - D. Prolonged and indicative of circulatory compromise

18. A 50-year-old male assigned to security forces, collapsed while on patrol. His head struck the pavement, but there is minimal external bleeding. His partner transported him to the nearest treatment station. His partner reports that the patient smokes about two packs of cigarettes per day and complained of left arm pain just prior to collapsing.

Current vital signs:

T 99.0

P thready and rapid

BP not audible

The most likely cause of the patient's tachycardia is (a):

- A. Pain
- B. Hypoxemia
- C. Cardiac dysrhythmia
- D. Head injury
- 19. A soldier presents with signs of heat exhaustion. He is alert but reports a headache and weakness.

Vital signs

HR 46

BP 100/50

RR 28

T 103°F

The most appropriate immediate treatment is to:

- A. Immerse the soldier in ice
- B. Administer atropine 0.5 mg IV and bolus with 2L NS
- C. Start a NS IV at 150 m/hr and place in a cool environment
- D. Remove all the soldier's clothing and place ice in his groin
- 20. A patient presents s/p blunt trauma to the chest following a motor vehicle crash. The patient is hypotensive with a decreased systolic pressure and an increased diastolic pressure. Lung sounds are audible bilaterally. The nurse should immediately set up for a:
  - A. Paracentesis
  - B. Thoracentesis
  - C. Pericardiocentesis
  - D. Diagnostic Peritoneal Lavage



- 21. The recommended sites for placement of a pulse oximetry probe are the:
  - A. Earlobe or nose
  - B. Nose or toes
  - C. Fingers or nose
  - D. Earlobe or fingers
- 22. To determine the correct size for an oropharyngeal airway the airway is measured from the
  - A. Tip of the nose to the tip of the earlobe
  - B. Center of the mouth to the tip of the earlobe
  - C. Corner of the mouth to the angle of the jaw
  - D. Corner of the mouth to the tip of the earlobe
- 23. A nurse is talking to an intubated patient. In response to the question "How are you?" the patient audibly says, "fine". Based on this information, which of the following actions is appropriate?
  - A. Do nothing, the patient said he is fine
  - B. Anticipate the need for immediate reintubation
  - C. Seek help from an ICU nurse
  - D. Remove the endotracheal tube as it is dislodged
- 24. <u>Immediate</u> post-procedural care of the patient who has undergone a thoracentesis includes applying a sterile dressing over the puncture site and:
  - A. Observing the patient for pleuritic chest pain
  - B. Observing the patient for hypoventilation
  - C. Delivering the specimen to the lab for analysis
  - D. Obtaining a CXR to rule-out pneumothorax
- 25. Following turning a patient with an endotracheal tube (ETT) onto his right side, the patient indicates he is having trouble breathing. Breath sounds are decreased on the left. The most likely causes for this finding is
  - A. Migration of the ETT into the right mainstem bronchus
  - B. Bronchospasm induced by movement of the ETT
  - C. Dislodgement of a mucous plug into the left bronchus
  - D. Position related change in left lung ventilation

- 26. A patient who was intubated in the triage area for acute respiratory failure requires transport to the critical care area. All of the following equipment is needed for the transport **EXCEPT**.
  - A. Cardiac monitor and ACLS drugs
  - B. Ambu bag and ACLS drugs
  - C. Cricothyrotomy kit
  - D. Oxygen tank and ambu bag/mask
- 27. The pressure gauge on the "H" oxygen tank reads "200". What is the appropriate action to accomplish at this time?
  - A. Document that the tank has been checked and has sufficient oxygen
  - B. Annotate that the tank was checked, time, date and initial the tag
  - C. Swap out tanks, bleed the tank to "empty" and turn it into logistics
  - D. Check tubing connections, relate to medical logistics a full tank is needed
- 28. Use of pulse oximetry in shock is:
  - A. Indicated; readings should be reliable
  - B. Contraindicated; readings are unreliable
  - C. Indicated; but readings may be erratic from reduced flow
  - D. Contraindicated; serial ABGs are the preferred method
- 29. A patient suffered smoke inhalation and burns to his upper extremities. On arrival, his SpO<sub>2</sub> is 98%, respiratory rate is 28/minute, and heart rate is 125 bpm. The pulse oximeter reading is:
  - A. Accurate and reflects the patient's respiratory status
  - B. Accurate: the increased respiratory rate will increase the SpO<sub>2</sub>
  - C. Falsely elevated because of the patient's hyperdynamic state
  - D. Falsely elevated due to the presence of carboxyhemoglobin
- 30. Use of a heimlich valve is contraindicated for a patient with a hemothorax.
  - A. True
  - B. False

- 31. A patient was diagnosed two weeks ago with pneumonia. Following a bout of severe, persistent coughing he presents to the facility with tachypnea, tachycardia, dusky color, distended neck veins, tracheal deviation, pulse oximetry = 88%, and chest pain. After applying oxygen, the most appropriate immediate response to this situation is to:
  - A. Place an intravenous catheter and perform a 12-lead ECG
  - B. Prepare for needle decompression and monitor for cardiac compromise
  - C. Transfer the patient to the OR for emergent insertion of a chest tube
  - D. Obtain a stat chest X-ray to determine if the pneumonia has worsened
- 32. The chest tube container (pleurevac) is smashed during transport. Which of the following is the correct immediate action?
  - A. Clamp the chest tube
  - B. Leave the chest tube open to air
  - C. Cover the tubing with a sterile dressing
  - D. Attach a heimlich valve to the tubing
- 33. Intermittent bubbling in the water-seal chamber of a chest drainage system when the suction is off indicates:
  - A. Re-expansion of the lung
  - B. Proper functioning of the drainage system
  - C. An air leak in the system
  - D. Suction to the drainage system is too high
- 34. Which of the following actions result in the greatest amount of chest tube drainage?
  - A. Hanging the tubing over the side of the litter
  - B. Running the tubing straight along the litter
  - C. Lifting and draining the tubing every 30 minutes
  - D. Coil the tubing on the litter
- 35. An airman had a chest tube inserted for a pneumothorax. There is slight fluctuation in the water-seal chamber with every respiration. This is an indication of:
  - A. Excessive inspiratory effort due to hypoxemia
  - B. Barotrauma due to excessive suction to the system
  - **C.** An air leak due to a disruption in the integrity of the closed-drainage system
  - **D.** Tidaling due to communication between the pleural space and drainage system

- 36. In a field setting, which of the following is the correct method for applying a flutter chest dressing?
  - A. Apply a field dressing by securing the "fluttering" dressing tails firmly around the chest
  - B. Apply the patient's own ID card, secure all the edges of the ID card with tape
  - C. Apply a sterile gauze dressing over the wound leaving the most dependent edge untaped
  - D. Apply a bio-occlusive, plasticized dressing taping all edges except the bottom
- 37. Lt Jones is admitted after sustaining blunt trauma to the chest. She presents with dyspnea, tachypnea, and decreased breath sounds on the right side, and hypotension. The most likely cause of these findings is a:
  - A. Flail Chest
  - B. Pulmonary Contusion
  - C. Rib Fracture
  - D. Tension Pneumothorax
- 38. Endotracheal tube placement is confirmed by the delivery of manual breaths while auscultating over the epigastrum, observing the chest rise and auscultating bilateral lung fields. After securing the tube, which of the following is most appropriate?
  - A. Document tube location and suction oropharynx
  - B. Monitor ventilator alarms for displacement of the tube
  - C. Document tube location, and confirm placement with CXR
  - D. Confirm placement with CXR and suction the airway
- 39. Which of the following patients is the best candidate for an oropharyngeal airway?
  - A. A conscious patient with increasing stridor
  - B. An unconscious patient with sonorous respirations
  - C. A semiconscious patient without facial trauma
  - D. A conscious patient with alcohol intoxication
- 40. Airway support is being provided to an unconscious patient who has broken teeth and blood in the oral cavity. The patient also has a possible maxillary fracture. The best choice for airway support for this patient is a (an)
  - A. Endotracheal airway
  - B. Nasopharyngeal airway
  - C. Oropharyngeal airway
  - D. Surgical cricothyrotomy

- 41. Which of the following is the optimal sequence to prepare a patient for airway suctioning?
  - A. Hyperoxygenation alone
  - B. Hyperoxygenation with hyperinflation
  - C. Hyperoxygenation with hyperventilation
  - D. Hyperinflation, hyperventilation, hyperoxygenation
- 42. The maximal period for endotracheal suctioning is:
  - A. 5-10 seconds
  - B. 10-15 seconds
  - C. 15-20 seconds
  - D. 20-25 seconds
- 43. The first step to relieve airway obstruction caused by the tongue and epiglottis is to:
  - A. Perform the Heimlich maneuver
  - B. Perform a head tilt with chin lift or jaw thrust
  - C. Suction with a Yankauer suction catheter
  - D. Insert an oral/nasal pharyngeal airway
- 44. A patient presents with labored breathing; BP 90/45; skin color is pale and ashen; distended neck veins, breath sounds are absent on the right side. What condition is most likely suspected?
  - A. Pericardial tamponade
  - B. Pleural effusion
  - C. Tension pneumothorax
  - D. Hemothorax
- 45. A soldier had an occlusive dressing applied to a chest wound. During transport from the field, the soldier begins to experience dyspnea, tachycardia, and signs of shock. The most appropriate immediate intervention is to:
  - A. Position the patient with the unaffected side down
  - B. Administer oxygen and increase the IV fluid rate
  - C. Reinforce the occlusive dressing
  - D. Replace the occlusive dressing with a flutter dressing

## Burns & Wound Management

- 46. A soldier arrives at a field site with a profusely bleeding shrapnel wound of the arm. The best initial course of action to control the bleeding is:
  - A. Surgical control
  - B. Elevation
  - C. Tourniquet
  - D. Direct pressure
- 47. A patient with burns complains of pain. The doctor orders morphine. Which route of administration would be most appropriate for this patient?
  - A. Subcutaneous
  - B. Intramuscular
  - C. Oral
  - D. Intravenous
- 48. Lt Lopez sustained a deep, contaminated, three-inch soft-tissue injury of the right lower leg. Transport by jeep from the field to the MTF took more than six hours. Initially, bleeding was controlled with a pressure dressing and elevation. Now at the MTF what course of action should be taken for this wound?
  - A. Irrigate the wound with at least 900 cc NS, dress it, and have him return in 3-4 days for follow-up
  - B. Anesthetize the wound, clean with an OR scrub sponge and suture it closed
  - C. Anesthetize the patient, cleanse, debride, and suture the wound closed
  - D. Irrigate the wound with 300 cc of a solution of Lidocaine and normal saline then suture the wound closed
- 49. A patient is being transported on a NATO Litter. Which plan will result in the optimal reduction in skin pressure?
  - A. Double folding a green military blanket
  - B. Use of a backrest
  - C. Turning the patient
  - D. Use of an aerovac mattress



Example of an alkali burn.

- 50. Initial treatment for an alkali burn wound consists of:
  - A. Rinsing with copious water
  - B. Appling of a neutralizing agent
  - C. Debriding a wound aggressively
  - D. Applying silver sulfadiazine
- 51. The preferred method of wound cleansing is:
  - A. Gentle cleansing of the wound with sterile saline and Q-tip
  - B. Copious, gentle irrigation with a saline/peroxide solution
  - C. Firm flushing of the wound with a 10-cc syringe and a solution of betadine and sterile saline
  - D. Using a catheter-tip syringe, irrigate gently and copiously with sterile saline or sterile water
- 52. What is the most likely serious injury from an electrical burn?
  - A. Respiratory distress and pulmonary edema
  - B. Superficial skin burns
  - C. Neurological injury
  - D. Vascular disruption and muscle damage
- 53. You have been pulled to the ER to respond to a helicopter crash-landing. The pilot is conscious, but has soot around his nose and mouth, and he is hoarse. Two large bore IVs have been placed. After initiating oxygen via a nonrebreather mask at 12-15 liters/minute the next course of action is to:
  - A. Prepare for a needle cricothyrotomy
  - B. Continue to closely monitor
  - C. Prepare for intubation
  - D. Administer diuretics for pulmonary edema

- 54. A patient sustains circumferential burns to both legs. Using the Rule of 9s, what percentage body surface area is affected?
  - A. 18
  - B. 27
  - C. 36
  - D. 45
- 55. Extremity dressings should be wrapped distally to proximally, taking care to avoid circulatory compromise.
  - A. True
  - B. False
- 56. An alert and oriented patient presents with difficulty breathing due to partial and full thickness burns of the upper torso, extremities and neck.
  - RR 30, with rapid and shallow breathing
  - BP 140/90
  - P 100

The immediate response after assessing the patient is to:

- A. Insert an oropharyngeal or nasal airway
- B. Prepare for an escharotomy
- C. Apply O<sub>2</sub> at 15L/min via nonrebreather mask
- D. Prepare for a cricothyrotomy
- 57. Using the 4ml/kg/ % body surface area (BSA) to calculate the intravenous fluid replacement of a patient weighing 60 kg with burns covering 50% of BSA. Half the volume is to be administered within the first 8 hours after the burn. How much fluid must the patient receive within the first eight hours?
  - A. 2000 ml
  - B. 4000 ml
  - C. 6000 ml
  - D. 8000 ml
- 58. In an adult, the initial fluid of choice for burn resuscitation is
  - A. D5½ Normal Saline
  - B. 0.9% Saline
  - C. D5 Lactated Ringers
  - D. Lactated Ringers

- 59. Which of the following is correct about the management of patients with a laceration wound to the neck.
  - A. Neck wounds often appear severe but are easily managed because of the shallow nature of all the vascular beds
  - B. A cricothyrotomy is the preferred artificial airway in this case
  - C. Morphine is the drug of choice for pain management in this patient
  - D. When applying a dressing to the neck secure it over the head or downward under the opposite armpit
- 60. SrA Johnson stepped on a land mine and has suffered a traumatic partial right below the knee amputation. She is pale, responsive only to pain, and bleeding profusely. SrA Johnson's presentation is:
  - A. Expected; partial amputations typically bleed more than complete amputations.
  - B. Expected; bleeding is rarely self-limited in either partial or complete amputations.
  - C. Unexpected; complete amputations typically bleed more than partial amputation
  - D. Unexpected; bleeding usually stops within minutes of either type of amputation.
- 61. You are responding to a terrorist bombing near your facility. A number of the victims have suffered ocular trauma due to flying glass and debris. You are caring for a victim with a presumed corneal abrasion. Which of the following is correct regarding the emergent management of this patient?
  - A. Patch the unaffected eye to reduce the risk of further injury
  - B. Prepare for emergency evacuation for definitive evaluation
  - C. Irrigate eye, apply ophthalmic antibiotics and patch eye, pro
  - D. Avoid pressure to the eye and initiate intravenous antibiotics
- 62. A soldier is three days S/P gunshot wound to the leg. She was in the field for approximately six hours before being evacuated. Initial surgical management was completed on admission. Which of the following is correct regarding wound care?
  - A. Pack the wound with a dry-sterile dressing
  - B. Insert a wet-to-moist dressing and change g12 hours
  - C. Clean the wound edges and approximate with butterfly tape
  - D. No additional care is required, as the wound will be surgically closed

63. You are in a convoy that comes under fire. You are caring for a soldier who has a wooden spike impaled in his chest.



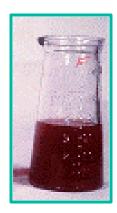
Emergent management would include assessing the ABCs, starting two IVs and

- A. Removing the impaled object
- B. Administering tetanus prophylaxis
- C. Applying direct pressure and dressing the wound
- D. Preparing for immediate aeromedical evacuation

### GI/GU/Fluid & Electrolytes

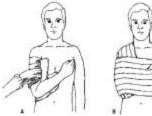
- 64. A male patient with a suspected anterior pelvic fracture and an abdominal blast injury reports the urge but inability to urinate. The appropriate action would be to insert a urethral catheter.
  - A. True
  - B. False
- 65. A Foley catheter is <u>contraindicated</u> for a patient that has experienced burns of the lower extremities, perineum, and genitalia.
  - A. True
  - B. False
- 66. Which of the following is the best way to determine if a nasogastric tube (NGT) is positioned in the stomach?
  - A. Aspirate with a syringe and observe for the return of stomach contents
  - B. Instill air and listen above the umbilicus for a "whooshing" sound
  - C. Place the tube's free end in water and observe for air bubbles
  - D. Irrigate the NGT with normal saline and observe for the return of the solution
- 67. Which of the following is the appropriate measurement to ensure correct placement of a nasogastric tube in the stomach? Tip of nose to the:
  - A. Xiphoid process
  - B. Xiphoid process to umbilicus
  - C. Ear lobe to xiphoid process
  - D. Earlobe to umbilicus
- 68. A soldier arrives at the EMEDS following a gunshot wound to the left thigh. The thigh wound has been stabilized, but the soldier continues to report lower left quadrant pain. The abdominal assessment reveals rebound tenderness in the left lower quadrant. Which of the following is correct regarding rebound tenderness.
  - A. It is a normal finding in patients with a traumatic injury
  - B. It may indicate peritonitis
  - C. It may indicate a bowel obstruction
  - D. It may indicate inflammation of the abdominal muscles

- 69. A victim was trapped for 6 hours under the rubble of a building after an earthquake. He has bilateral crush injuries to his legs and is being prepared for surgery. Upon placement of a urethral catheter he had 200 ml of urine in his bladder (see photo). This patient is at greatest risk from which of the following:
  - A. Increased Potassium
  - B. Decreased Calcium
  - C. Increased Creatine Phosphokinase
  - D. Decreased Phosphate





- 70. A flight line mechanic who was involved in a vigorous game of "touch-football" presents with severe ankle pain. X-rays indicate swelling with bruising but no other injury. Appropriate management of this patient includes:
  - A. Heat, range of motion, non-weight bearing, analgesia
  - B. Rest, ice, compression, elevation
  - C. Ice for 12 hours and non-weight bearing activity
  - D. Administration of NSAID and return to duty
- 71. A patient with a newly casted ulnar fracture reports severe pain that persists despite ice, elevation, and administration of analgesic. The most appropriate action is to:
  - A. Administer a combination dose of IV narcotic and anxiolytic
  - B. Continue to monitor, as this is normal after a fracture
  - C. Bivalve the cast and reassess the patient's condition
  - D. Request an X-ray to determine if the fracture was reduced
- 72. A patient with a blast injury has a lower extremity that is pale, cool to the touch and a capillary refill time of greater than 3 seconds. These findings are indicative of:
  - A. Inadequate venous return
  - B. Inadequate arterial supply
  - C. Normal vascular function
  - D. Venous congestion
- 73. The "sling and swath" dressing in the following graphic is appropriate for which type of injury?



- A. Fracture of the sternum
- B. Radial nerve injury
- C. Fracture of the humerus
- D. Ulnar fracture

- 74. A 27-year-old patient received bilateral tib/fib fractures after a rollover accident in a HUMVEE. He has a plaster cast on his left leg and an external fixator on his right leg; and he must be air evacuated for further care. To prevent compartment syndrome in flight, which preventive measures are appropriate?
  - A. Apply traction and monitor pain and neurovascular status
  - B. Ensure the patient will fly within 24 hours of receiving his cast
  - C. Univalve cast and keep the extremity at heart level
  - D. Bivalve cast and keep the extremity at heart level
- 75. Which of the following is an **early** sign of a developing pressure ulcer underneath a cast?
  - A. Severe pain over bony prominence
  - B. Intermittent or persistent burning
  - C. Swelling of the casted extremity
  - D. Diminished capillary refill
- 76. A soldier suffered a femur fracture after a night jump. Twenty-four hours later the soldier is apprehensive, having respiratory distress, and has petechiae on his chest and neck.

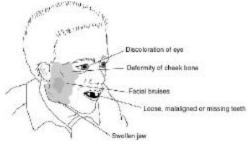
Temp 100 P 110 RR 28

The soldier is most likely experiencing (a):

- A. Compartment Syndrome
- B. Hemorrhage
- C. Fat embolism
- D. Deep vein thrombosis
- 77. A patient presents with a spinal cord injury above T-6. Assessment reveals a heart rate of 52, blood pressure of 80/40, warm dry skin and absent reflexes below the level of the lesion. The most appropriate action would be to:
  - A. Continue to reassess for changes in vital signs and reflexes
  - B. Do nothing, as this is normal for a patient with this type of injury
  - C. Suspect neurogenic shock and notify the physician immediately
  - D. Place the patient in trendelenburg position and administer IV fluids

- 78. An accident victim has been placed on a long spine board. It is a long transport for treatment. The accident victim complains that the board is uncomfortable. The nurse
  - A. Informs the patient that the discomfort is only temporary
  - B. Applies padding to spaces between his body and the board to decrease discomfort
  - A. Removes and reapplies the board because it should not cause discomfort
  - B. Reassures the patient that spine boards are uncomfortable but nothing can be done
- 79. Which of the following is the most sensitive and reliable indicator of a patient's clinical condition following head injury?
  - A. Pupillary changes
  - B. Motor function
  - C. Level of consciousness
  - D. Vital Signs

A soldier presents with the following injury pattern after being hit in the face with a rifle butt.



- 80. Immediate care for this patient includes
  - A. Contacting the dentist to assist with salvage of the teeth
  - B. Stabilizing the cervical spine
  - C. Administering oxygen
  - D. Performing a neurological exam to detect cerebral trauma
- 81. This patient becomes nauseated and vomits. Placing a nasogastric tube is discussed. Which of the following is the most important consideration before placing an NG tube in this patient?
  - A. Can the patient swallow?
  - B. Has a tracheal injury been ruled out?
  - C. Has a midface or basilar skull fracture been ruled out?
  - D. Is the nausea a sign of a head injury that should not be suppressed?

- 82. The correct size for a C-collar is determined by measuring
  - A. The circumference of the neck
  - B. From the occipital protuberance to the superior aspect of the scapula
  - C. From the chin to the point on the shoulder where the collar will rest
  - D. From the sternal notch to the mandible
- 83. A patient with a C-collar requires logrolling when turning
  - A. True
  - B. False
- 84. Airman Franks is one week post an above the knee amputation due to a landmine injury. Which of the following is correct regarding stump management.
  - A. Semi-Fowlers position should be maintained to avoid traction on stump
  - B. Risk of bleeding is minimal postoperatively
  - C. Delayed primary closure is recommended due to risk of infection
  - D. Continuous traction should be maintained

#### NBC Triage Medications Pain Management

#### The following table is used for Question 85

Dilution Table for Sterile Cefazolin Sodium (Kefzol, Ancef)			
Vial Size	Diluent to be Added	Approx Available Volume	Approximate Average Conc.
250 mg	2 ml	2 ml	115 mg/ml
500 mg	2 ml	2.2 ml	225 mg/ml
1 gram	2.5 ml	3 ml	330 mg/ml

85. The MD orders 500 mg Ancef IV q8 hours for 48 hours. The medication shipment for this week contains only 1 gm vials of Ancef.

How many vials are needed for the total 48 hour dose?

- A. 1
- B. 3
- C. 6
- D. 8
- 86. The nurse suspects neurovascular compromise in a patient with a full leg cast. Which of the following is correct about bivalving a cast?
  - A. The nurse may not bivalve the cast without a physician's order
  - B. Split the cast to the level of suspected compromise
  - C. Split the cast on each side over its entire length
  - D. Cut a hole in the cast at the point of suspected compromise
- 87. A short acting benzodiazepine (e.g., temazepam) is indicated for individuals with battle fatigue who are unable to sleep.
  - A. True
  - B. False
- 88. In the treatment of Combat Stress Reaction, haloperidol (haldol) is only indicated for extremely agitated patients who do not respond to routine treatment.
  - A. True
  - B. False

- 89. Sgt Rambo presents to the EMEDS. He has sustained an animal bite. What action should be taken first?
  - A. Administer the rabies vaccine.
  - B. Wash the wound thoroughly with soap and water
  - C. Obtain venous access with two large bore IVs
  - D. Obtain an ECG, arterial blood gas and serum chemistry
- 90. A soldier has returned several days after receiving his initial anthrax vaccine injection. He reports local erythema, pain and a subcutaneous nodule at the insertion site. He is experiencing:
  - A. An adverse reaction, and the doctor must be notified immediately
  - B. A typical side effect to the injection of the dead anthrax bacteria
  - C. A non-typical side effect to the injection of the inactivated bacteria
  - D. The beginning of a systemic reaction that will develop into a rash
- 91. Which of the following is a contraindication to the administration of immunizations?
  - A. Family history of an adverse reaction after vaccination
  - B. Recent exposure to an infectious disease
  - C. Moderate illness with or without a fever
  - D. History of nonspecific allergies or relatives with a history of allergies
- 92. A soldier presents with a gunshot wound that has been contaminated by dirt. The soldier cannot tell you her immunization status. Which of the following immunizations should be administered?
  - A. Td (Tetanus toxoid-containing vaccines)
  - B. DPT (Pertussis antigen-containing vaccines)
  - C. MMR (Measles, mumps and rubella virus-containing vaccines)

93. A patient is one-day post abdominal surgery. As you approach his cot, the patient smiles at you and continues talking and joking with a visitor. Your assessment reveals the following:

BP 120/80 HR 80 R 18

Pain: 8 (scale of 0-10)

The above assessment was made two hours after the patient received morphine 2mg IV. Half-hourly pain ratings following the injection ranged from 6-8 and the patient showed no clinically significant respiratory depression, sedation, or other side effects. The patient identifies 2 as an acceptable level of pain. The order for analgesia is morphine IV 1-3mg Q1H prn.

What is the most appropriate intervention?

- A. Administer no morphine at this time
- B. Administer 1 mg morphine IV now
- C. Administer 2 mg morphine IV now
- D. Administer 3 mg morphine IV now
- 94. The most appropriate administration of analgesics in the first 48 hours after surgery is:
  - A. After comfort measures have failed
  - B. Upon patient request
  - C. On a routinely scheduled pattern
  - D. When the pain becomes unbearable
- 95. You are deployed to support a wintertime exercise at a northern tier base. A flight line security guard presents with swelling of his fingers/toes with loss of function. The digits are pale white. A preliminary diagnosis of superficial frostbite is made. The most appropriate plan of treatment includes:
  - A. Slowly rewarming the affected digits and return the airman to duty
  - B. Wrapping the affected extremities in dry heat rewarming pads
  - C. Rapidly rewarming the affected digits in a 100°F waterbath
  - D. Passively rewarming the digits and then debriding any necrotic tissue
- 96. A line unit requested a presentation on the prevention of frostbite. The lesson plan includes a discussion of:
  - A. The increased risk in older individuals
  - B. Prevention by massaging exposed digits and areas of the body
  - C. Prevention by wearing clean loosely layered clothing
  - D. Prevention by performance of exercise to facilitate sweating

- 97. A squad of marines who were on patrol in dense foliage 4-hours ago present with blisters on their hands, ocular hyperemia and lacrimation, and sneezing, rhinorrhea and hoarseness. Mustard gas exposure is suspected. Following decontamination the initial treatment includes
  - A. Administering a Mark I antidote kit
  - B. Bandaging the eyes following copious lavage with sterile water
  - C. Administering a nebulized bronchodilator
  - D. Debriding the blisters and cleansing the areas with sterile saline
- 98. You have been deployed to sub-Saharan Africa. A senior officer presents with confusion and a history of a sustained fever, headache, and stiff neck. He is diagnosed with meningococcal meningitis (neisseria meningitidis). Due to the highly infectious nature of this disease, which of the following is the most appropriate initial action?
  - A. Prophylactically treat all staff in the EMED with ciprofloxacin
  - B. Place the patient under droplet precautions
  - C. Administer gamma globulin for any personnel in contact with the patient
  - D. Place the patient into strict isolation
- 99. If you have completed the three shot series for Hepatitis B you are immune to Hepatitis B.
  - A. True
  - B. False

#### Items 100 and 101 refer to the following scenario:

You have been deployed to a refugee camp in support of a humanitarian mission. There has been an outbreak of diarrheal disease.

- 100. Which is correct regarding the type of isolation required for these patients?
  - A. Contact precautions
  - B. Droplet precautions
  - C. Strict isolation
  - D. Standard precautions

- 101. Many of the refugees are severely malnourished and dehydrated. When providing rehydration therapy for these patients which of the following is correct?
  - A. To maximize caloric intake only fluids with nutritional value (no water) should be ingested.
  - B. Most patients with severe diarrheal disease will require IV rehydration
  - C. For a patient who cannot drink but is not in shock, rehydration may be accomplished with oral rehydration solution through an NG
  - D. Oral fluid intake and all oral nutritional supplementation should be withheld to allow for complete bowel rest until the diarrhea resolves
- 102. The principle "expectancy" of the BICEPS treatment plan means to expect:
  - A. The troop to recover, with recovery defined as return to duty
  - B. Treatment at a central location away from the hospital
  - C. That three "hots and a cot" will return a troop to duty
  - D. Treatment for three days before deciding to evacuate
- 103. A soldier presents with hyperventilation and a choking sensation, tachycardia, dry mouth and dizziness. The soldier reports an overwhelming sense of fear. The most likely diagnosis is
  - A. Combat Stress Reaction
  - B. Cyanide exposure
  - C. Blister agent exposure
  - D. Nerve agent exposure
- 104. A person experiencing Combat Stress Reaction may improve with:
  - A. Forty-eight hours rest and relaxation
  - B. Three "hots and a cot"
  - C. Evacuation to 2<sup>nd</sup> echelon care
  - D. Group support and counseling
- 105. In a wartime scenario, which one of the following casualties would receive priority care? The casualty
  - A. With an open fracture of the tibia with bleeding controlled
  - B. Mumbling incoherently, attempting to flee to "shoot the enemy"
  - C. Experiencing symptoms of "Combat Stress Reaction"
  - D. With partial thickness burns to the face with respiratory distress

106. A thirty-year-old male involved in a motor vehicle crash struck a tree at high speed and was ejected. The patient is lying on the ground, alert and oriented but apprehensive when speaking with you. He is guarding his pelvic region and cries out in pain upon palpation. BP is 100/60, P 92, R 28 rapid and shallow. Pulse in LLE is +2 with good capillary refill and RLE pulse is weak with slow capillary refill. There are no other casualties.

After assessing this patient the appropriate triage category would be:

- A. Minimal
- B. Delayed
- C. Immediate
- D. Expectant
- 107. Which of the following is a potential cause of hypokalemia?
  - A. Nasogastric suctioning
  - B. The first 24-hours after a severe burn
  - C. Transfusion of banked blood
  - D. Renal failure
- 108. A nurse is acting as the triage officer and over 50 casualties from a terrorist bomb blast are expected. Supplies are extremely limited and your re-supply date is unknown.
  - Patient 1 has abrasions and contusions.
  - Patient 2 has bilateral fractured femurs with intact neurovascular status.
  - Patient 3 has full thickness burns to face, hands, feet, and trunk total BSA 60%.

Place the first three patients in the most appropriate initial triage categories:

- A. Patient 1, delayed; Patient 2, delayed; Patient 3, immediate
- B. Patient 1, delayed; Patient 2, immediate; Patient 3, immediate
- C. Patient 1, minimal; Patient 2, delayed; Patient 3, expectant
- D. Patient 1, minimal, Patient 2, delayed; Patient 3, immediate
- 109. There has been an outbreak of tuberculosis in a refugee camp and these patients are being admitted to the EMEDS. Which of the following infection control practices is appropriate for these patients?
  - A. Place patients in strict isolation
  - B. Place patients in a separate open-air tent downwind of the main facility
  - C. Have all staff wear surgical masks and gowns when caring for these patients
  - D. Begin prophylactic INH therapy for all staff exposed to these patients